

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of  
**diGirolamo et al.**

Serial No.: 10/618,892

Filed: July 14, 2003

For: **Brick Tie**

Attorney's Docket No: 4782-031

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

)  
) Patent Pending  
)  
) Examiner: Robert J. Canfield  
)  
) Group Art Unit: 3635  
)  
) Confirmation No.: 6857  
)  
)  
)

**CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]**

I hereby certify that this correspondence is being:

☒ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Appeal Brief Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) 273-8300.

October 28, 2005

Date

Kathy L. Stehle

Dear Sir or Madam:

The present appeal brief is filed in triplicate pursuant to 37 C.F.R. § 1.192. Applicants also encloses a check in the amount of \$250.00 as required by 37 C.F.R. § 1.17(b). If additional fees are required please charge them to Deposit Account No. 18-1167.

**APPEAL BRIEF**

**(I.) REAL PARTY IN INTEREST**

The real party in interest is The Steel Network, Inc.

**(II.) RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences.

10/31/2005 HDETA1 00000123 10618892 250.00 0P  
01 FC:2402

### **(III.) STATUS OF CLAIMS**

Claims 1-4, 7-10 and 15-28 are pending in this application. Claims 1-4, 7-10 and 15-27 are being appealed. Claim 28 has been objected to and the Examiner has indicated would be allowable if written in independent form.

### **(IV.) STATUS OF AMENDMENTS**

There are no amendments pending.

### **(V.) SUMMARY OF CLAIMED SUBJECT MATTER**

Claim 1 calls for a brick tie that is interconnected between a brick wall 12 and a backup wall 14 where the backup wall includes spaced apart studs 18 and a wallboard 16 secured to the studs. Spec. p. 4, Fig. 1. A plate 20 is adapted to fit flush against the wallboard 16 and includes a backside and a front side. Spec. p. 4, Figs. 2-5. A series of triangular shaped spikes 24 are cut from the plate and bent outwardly from the plate. Each triangular shaped spike 24 forms a triangular shaped opening in the plate and projects outwardly from the plate adjacent the triangular shaped opening formed by the spike. The series of spikes 24 project into the wallboard 16 and at least partially secure the plate to the wallboard 16. Spec. p. 4, Figs. 2-5. The plate includes a fastener opening 26. Spec. p. 5, Figs. 2-5. A series of fasteners 28 project through the fastener openings 26 and through the wallboard 16 and into the flange of one of the studs 18 for securing the plate 20 to the studs. Spec. p. 5, Figs. 6 and 10. A tie holder 30 is formed on the front side of the plate 20. Spec. p. 5, Figs. 2-5. A tie 32 is secured to the tie holder 30 and is freely movable up and down within the holder. The tie projects from the holder and is adapted to be secured between two courses of brick such that the backup wall 14 is interconnected to the brick wall 12 via the brick tie 32. Spec. p. 6, Figs. 2-5.

Claim 8 is drawn to a method of anchoring a brick wall 12 to a backup wall 14 having a series of studs 18 and a wallboard 16 connected to the studs. Spec. p. 4, Fig. 1. The method includes aligning a plate 20 of a brick tie 10 with the flange of the stud 18 and securing the plate 20 to the wallboard 16 about a side of the wallboard opposite the flange of the stud 18. Spec. p. 6, Figs. 1 and 6. Securing the plate 20 to the wallboard 16 includes projecting a series of spikes 24 from the backside of the plate into the wallboard 16 such that the plate is aligned with the stud 18. Spec. p. 6, Figs. 1 and 6. The spikes 24 are triangular shaped and cut from the plate 20 and bent outwardly from the plate such that each triangular shaped spike forms a triangular shaped opening in the plate and projects outwardly from the plate. Spec. p. 4, Figs. 2-5. Next, the method entails extending a series of fasteners 28 through a front face plate 20 and through the wallboard 16 and directly into the aligned flange of the stud 18. Spec. p. 5, Figs. 1 and 6. The method further entails extending a tie 32 from the face of the plate outwardly therefrom to a position overlying a course of brick. Spec. p. 6, Figs. 1 and 6. Finally, the method entails adding an additional course of brick over the tie 32 such that the tie is sandwiched between two courses of brick such that the brick tie 32 interconnects the brick wall 12 with the backup wall 14. Spec. p. 7, Figs. 1 and 6.

Claim 15 is directed to a brick tie 10 that is interconnected between a brick wall 12 and a backup wall 14. Spec. p. 4, Fig. 1. A plate 20 forms a part of the brick tie 10 and is secured to the backup wall 14. Spec. p. 4, Figs. 1 and 6. Plate 20 includes one or more fastener openings 26 and one or more fasteners 28 that project through the fastener openings for securing the plate 20 to the back wall. Spec. p. 5, Figs. 1-6 and 10. A retainer 30 is associated with the plate. Spec. p. 5 and Figs. 2-5. A tie 32 is held by the retainer 30 and projects outwardly from the retainer such that the tie can be secured between two courses of brick. Spec. p. 6, Figs. 1-6. A series of triangular shaped spikes 24 are cut from the plate and bent outwardly from the

plate such that the triangular shaped spike form corresponding openings in the plate and project outwardly from the plate. Spec. p. 4, Figs. 2-5.

Claim 20 calls for a brick tie 10 that is interconnected between a brick wall 12 and a backup wall 14. Spec. p. 4, Fig. 1. The brick tie includes a plate 20 secured to the backup wall 14. Spec. p. 4, Figs. 1-6. The plate is provided with at least one fastener 28 for securing the plate to the backup wall. Spec. p. 5, Figs. 6 and 10. There is provided an elongated slot 29 or 30 formed in the plate 20. Spec. pp. 5 and 8, Figs. 2-5 and Figs. 7-8. A tie 32 is confined in the slot and movable back and forth therein. Spec. p. 6, Figs. 2-5 and Figs. 7-8. The triangular shaped spikes 24 are cut from the plate and bent outwardly from the plate such that each triangular shaped spike forms a triangular shaped opening in the plate and projects outwardly from the plate. Spec. p. 4, Figs. 2-5.

#### **(VI.) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 1, 2, 7-10 and 15-25 are rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 5,816,008 to Hohmann, in view of U.S. Patent No. 1,810,597 to Corwin.

Claims 1, 2, 7-10, 15-18, 20-23 and 26 are rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 4,955,172 to Pierson, in view of U.S. Patent No. 1,810,597 to Corwin.

Claims 24, 25, and 27 are rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 4,955,172 to Pierson, in view of U.S. Patent No. 1,810,597 to Corwin, in further view of U.S. Patent No. 4,206,577 to Moriez et al.

Claims 1-4, 7-10, 15 and 19-22 are rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 4,373,314 to Allan in view of U.S. Patent No. 1,810,597 to Corwin.

## **(VII.) ARGUMENT**

### **A. The law of obviousness**

It is fundamental that rejections under 35 U.S.C. § 103 must be based on evidence comprehended by the language of that section. *In re Grasselli*, 713 F.2d 731, 739 (Fed. Cir. 1983). The basic and essential factual evidence on the issue of obviousness is set forth in *Graham v. John Deere, Co.*, 383 U.S. 1, 17-18 (1966) and extensive ensuing precedent. The patent examination process centers on prior art and the analysis thereof. When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation or suggestion to select and combine the references relied upon. See, e.g., *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52 (Fed. Cir. 2001) (the central question is whether there is reason to combine the references, a question of fact drawing on the Graham factors.)

The mere fact that prior art can be modified to form a claimed invention does not make that modification obvious absent a showing that the prior art suggested the desirability of the modification. *In re Laskowski*, 871 F.2d 115, 117 (Fed. Cir. 1989); *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984).

A rejection based on § 103 must rest on a sound factual basis, and these facts must be arrived at without reconstructing the invention from the prior art through hindsight. In making this evaluation, all facts must be considered. The PTO has the initial duty and obligation of setting forth the factual basis for its obviousness rejection. It may not, because it may doubt that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply the deficiencies in its factual basis; *In re Warner*, 379 F.2d 1011, 1017 (CCPA 1967), *cert. denied*. 389 U.S. 1057 (1968).

The need for specificity pervades judicial decisions on the issue of obviousness. See, e.g., *In re Kotzab*, 217 F.3d 1365, 1371 (Fed. Cir. 2000) (“particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.”); *In re Rouffet*, 149 F.3d 1350, 1359, (Fed. Cir. 1998) (even when the level of skill in the art is high, the PTO must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the PTO must explain the reasons one of ordinary skill in the art would have been motivated to select the references and combine them to render the claimed invention obvious.”); *In re Fritch*, 972 F.2d 1260, 1265 (Fed. Cir. 1992) (the Examiner can satisfy the burden of showing obviousness of the combination “only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references”).

In supporting a position on obviousness, the PTO must set forth clear and particular findings and these findings must be competent. That is, with respect to core factual findings in determining patentability, the PTO cannot simply reach conclusions based on understanding or experience or on its assessment of what would be basic knowledge or common sense; *In re Zurko*, 258 F.3d 1379, 1385 (Fed. Cir. 2001). Rather, the PTO must point to some concrete evidence in the record in support of findings on obviousness. *Id.*

#### **B. Claims 1, 2 7-10 and 15-25 are not obvious over Hohmann and Corwin**

The Patent Office has the burden of proving obviousness. This requires the Examiner to make out a prima facie case of obviousness. As detailed below, the Examiner has failed to carry this burden. Every one of the Examiner’s 103 rejections is based on combining the Corwin reference with a primary reference. In each case, the proffered motivation to combine is

identical. For that reason, this argument applies to each of the rejections and will not be repeated.

Claim 1 is as follows:

1. A brick tie for being interconnected between a brick wall and a back-up wall having a series of spaced apart studs and a wall board secured to the studs wherein each stud includes a pair of spaced apart flanges and a web extending between the flanges, the brick tie comprising:
  - a. a plate adapted to fit flush against the wall board, the plate including a back side and a front side;
  - b. a series of triangular shaped spikes cut from the plate and bent outwardly from the plate such that each triangular shaped spike forms a triangular shaped opening in the plate and projects outwardly from the plate adjacent the triangular shaped opening formed by the spike, and wherein the series of spikes project into the wall board and at least partially secure the plate to the wall board;
  - c. fastener openings provided in the plate;
  - d. a series of fasteners projecting through the fastener openings and through the wall board and into the flange of one stud for securing the plate to the stud via the flange;
  - e. a tie holder formed on the front side of the plate; and
  - f. a tie secured to the tie holder and freely movable up and down within the tie holder, the tie projecting from the tie holder and adapted to be secured between two courses of brick such that the back-up wall, including the studs thereof, is interconnected to the brick wall via the brick tie.

All of the claims on appeal are similar to claim 1 inasmuch as each claim includes the triangular shaped spikes limitation. In each of the rejections, the Examiner acknowledges that the primary reference does not disclose triangular shaped spikes. Indeed, none of the primary references even disclose a brick tie that has any type of spikes. In making the obviousness rejection, the Examiner has relied on the secondary reference of Corwin.

First, it should be noted that Corwin does not relate to a brick tie or any device that is concerned with forming an interconnection between a brick wall and a backup wall. To the

contrary, Corwin discloses a means of hanging a wallboard 10 to a metal frame structure. As shown in the drawings, Corwin discloses a woody fibrous material that is formed into a board 10. Further, Corwin discloses a metal strip 12 having a series of prongs 15 that project from one side, and a series of tongues 13 that project from the other side. Strip 12 is secured to the board 10 by “driving” the prong into the board. Corwin, p.2, ll. 20-23. The board is then hung on a metal frame structure such as shown in Figure 7. This metal frame structure includes a series of openings 17 in the flange portions thereon. Openings 17 are specifically spaced to receive the tongues 13. Hence, a wallboard 10 having the strip 12 secured thereto can be hung on the frame structure as illustrated in Figure 1 by projecting the tongues 13 through the openings 17 formed in the frame structure.

In the case of the first obviousness rejection, that is the obviousness rejection set forth in paragraph 3 of the final office action, the Examiner concedes that Hohmann fails to show the triangular shaped spikes. Final Office Action p. 2. However, the Examiner notes that Corwin teaches triangular shaped spikes and takes the position that it would be obvious to use the Corwin triangular spikes in the brick tie of Hohmann. Final Office Action p. 2, ¶ 3. Then to provide the critical motivation requirement and attempt to satisfy the burden of proving a prima facie case of obviousness, the Examiner sets forth the following proffered motivation:

It would have been obvious because it is suggested by Corwin to use triangular shaped tangs 115 to partially secure a plate prior to using screws or nails to more permanently secure the plate and for providing additional securement of the plate to the wall board.<sup>1</sup>

Final Office Action, p. 3.

---

<sup>1</sup> The final office action includes three other obviousness-based rejections. All three are based on Corwin as a secondary reference and includes this identical proffered motivation. Thus, by prevailing in this argument, all claims in the application would be allowable.



**1. There is no factual basis for the proffered motivation**

There is nothing in the record to instruct Applicants or the Board as to where the Examiner found this alleged motivation. There is no cite to the Corwin patent, nor to the primary reference of Hohmann. This is true for all of the obviousness rejections in this case.

However, it is clear that the Examiner states that the proffered motivation comes from Corwin. That is, the Examiner's position is that Corwin suggests using triangular shaped tangs or prongs 115 to partially secure a plate prior to using screws or nails to more permanently secure the so-called plate to the wall board. Applicants have carefully considered the Corwin patent and no such motivation is found. There is no teaching of using a two step attachment process wherein the prongs 15 or 115 are first used to partially secure the strip 12 to the board 10 prior to using screws or nails to more permanently secure the strip. Indeed, the Examiner's proffered motivation is based, in part at least, on the factual finding that the prongs 15 or 115 are not permanent connections, but are only temporary connections and that nails or screws are utilized to form a permanent connection between the strip 12 and the board 10 in Corwin. There is no such teaching in the Corwin patent. As discussed below, according to Corwin, the prongs 15 and 115 do indeed form permanent connections and are even used in the absence of screws or nails. Furthermore, as specifically stated in the Corwin patent, the installer has an option. The strips 12 can be secured by either the prongs 15 or screws or nails. Corwin, p. 2, ll. 15-19.

Strip 12 along with its associated structure of the prongs 15 and tongue 13 are described in the Corwin patent as follows:

This strip preferably of metal has coacting means, as the tongue 13 extending therefrom and in position to cooperate with complementary means to be described. In order to secure the strip 12 in place on the wall member 11, I have provided suitable securing means. These securing means may be of any suitable character as screws or nails to coact with the holes 14 shown in Figure 3 or the prongs or tangs 15 shown in Figures 2, 3 and 4.

The prongs or tangs 15 are preferably not at the same angle when driven into the wall member and are preferably placed to extend some slightly toward one end and some toward the opposite end as shown in Figure 2. When the strip is forced down and the prongs enter the wall member there will be a clinching action by the prongs. This will be assisted if the ends of the prongs are slightly bent as shown in Figure 3. The prongs at one end may be made straight to assist in getting the strip properly started when being attached. One of the characteristics of a material as emulsified as asphalt is that it does not dry and harden immediately. In this way, when the strip is forced downwardly and against the asphalt, the latter by its adhesive action, holds the strip and furnishes an additional holding means to retain the strip in place.

Corwin patent, col. 3, ll. 10-39.

Thus, Corwin explicitly teaches that the strip 12 can be secured to the board 10 by either the prongs 15 or by screws and nails. Corwin's use of the disjunctive "or" is clear. This explicit teaching from Corwin is much different from a teaching of utilizing the prongs 15 to temporarily secure the strip 12 to the board 10, and then following that with permanently securing the strip with nails or screws.

In all of the Corwin embodiments where the strip 12 includes the prongs 15 there is no showing of nails or screws for providing additional securing means. For example, the Board is referred to the strip 12 provided on the extreme left hand side of Figure 1. Note that this strip includes openings 14 for nails or screws. However, there are no nails or screws provided. In Figure 4 the strip 12 is secured to the Board 10. There are no nails or screws extending through the openings 14. Figures 5 and 8 show various types of frame structures having the wall board 10 secured thereto by the strips 12. There does not appear to be any nails or screws shown in these drawings that secure the strip 12 to the wall board. The Examiner points to prongs 115 shown in Figure 6. Even in this case there are no nails or screws shown securing the strip 112 to the wall board.

As further evidence that the Corwin patent does not support the proffered motivation, the Corwin system recognizes specifically that the strip 12 can be secured by the prongs 15 or by nails or screws as discussed above. This is because Corwin discloses that the strips 12 do not even require the prongs 15. Specifically, Corwin indicates that the strip can be retained in place solely by screws or nails. Corwin, lines 65-66. Indeed, one of the strips 12 shown in Figure 1 (the second strip from the left side) does not even include the prongs 15.

Furthermore, in the Corwin system the impetus for the proffered motivation does not exist. That is, the Examiner's motivation is built on the idea that it is desirable to have a two-phase attaching approach where the prongs 15 serve to temporarily secure the strip to the board 10, and thereafter, the strip is permanently attached by screws or nails. This desire is actually taught by Applicants, and is important when one is attempting to align the attaching structure with another structure, such as in Applicants' case where the idea is to align the brick tie with a stud that lies behind the wall boarding. In the Corwin case, Mr. Corwin was only concerned with attaching the strip 12 to the board. Other than attaching the strip 12 to the board there were no alignment concerns. This is because the prongs 15 that project from the strip 12 were particularly spaced and designed to be received in the openings 17 of the frame structure. This is illustrated in Figure 1.

The proffered motivation also includes the notion that Corwin suggests using the prongs 15 to partially secure the strip to the board 10. Nowhere in Corwin is partial securement mentioned or shown. Indeed, Corwin expressly states that the prongs alone can and will adequately secure the strip 12 to the board 10. Furthermore, the concept of partial securement implies that other securing means are used in combination with the prongs 15. There is no support for this idea. Again, Corwin expressly uses "or" when he describes the options of utilizing the prongs 15 or nails or screws. Nowhere does Corwin show the use of both prongs 15 or nails or screws. Again, in Figure 1 the strip 12 that includes the prongs 15 is secured

entirely to the board 10 by the prongs 15. The same holds true for the Figure 4 embodiment. In all of the embodiments illustrated on page 2 of the drawings, including Figures 5, 6, 7 and 8, there is no teaching of utilizing nails or screws in combination with the prongs.

Also, in the proffered motivation there is the factual finding that Corwin suggests that the spikes provide additional securement for securing the strip 12 to the board 10. Again, as just discussed, that finding has no support whatsoever. The concept or idea of utilizing the prongs for additional support along with nails or screws is based on impermissible hindsight as that idea or concept is nowhere to be found in the Corwin patent. Furthermore, there is no indication that adding additional securing means to the Hohmann brick tie would have any utility or any advantages. Note for example in Figure 2 where Hohmann already utilizes very robust screws 46. Utilizing spikes to add additional securing means would only complicate the manufacturing process and make the Hohmann brick tie more expensive. That applies to all of the brick ties disclosed in all of the primary references.

One may question why are the nail or screw openings 14 formed in the strips 12. Corwin does not address this question. However, there are a number of undisputed facts that are noteworthy. It is undisputed that nails or screws are not required. As noted above, Corwin expressly teaches that the strips 12 can be secured by either the prongs 15 or nails or screws. Further, it is undisputed that the prongs 15 are permanent connections, that is, nails or screws are not required. One can only surmise that since Corwin showed an embodiment without the prongs 15 which necessitated nail or screw openings 14, that Corwin simply used common tooling to make the strips 12 provided with the prongs 15, which resulted in the openings 14 provided therein. It is, of course, undisputed that Corwin nowhere showed the use of screws or nails to secure the strip to the board 10 where the strip included prongs 15.

**2. The proffered motivation is improperly based on the Applicants' disclosure**

From reviewing Corwin and the other cited art, one cannot find evidence of the proffered motivation. However, the record as a whole does indeed contain the proffered motivation. It is in Applicants' disclosure. The Board is directed to Applicants' patent application where the Applicants describe as follows:

In using the brick tie **10** of the present invention, it is important to appreciate that before the brick tie is secured to the wallboard **16**, that the plate **20** should be aligned with a stud **18** disposed on the opposite side of the wallboard. That is, the plate **20** should be properly aligned with the stud **18** such that when the fasteners **28** are extended through the plate **20** that the fasteners will engage and be secured into the flange **18A** of the aligned stud. In any event, when the brick tie **10** is properly aligned, a brick mason or other individual can simply press the plate **20** into the wallboard. This, of course, causes the spikes **24** to penetrate the wallboard and secure the plate in a firm position on the wallboard **16**. Thereafter, the screws or fasteners **28** are extended through the fastener openings **26**, through the wallboard **16** and into the flange **18A** of the aligned stud **18**. In other words, the screws or fasteners **28** are screwed into the side flange **18A**. Now that the plate **20** has been securely anchored to the back-up wall **14**, the brick mason can vertically adjust the tie **32** to a proper position with respect to a course of brick or block.

Applicants' patent application, p. 6, ll. 12-25.

It is respectfully urged that this is where the motivation to combine originated. The Applicants' disclosure cannot, itself, be a basis for the proffered motivation. *Heidelberger Druckmaschinen AG v. Hantscho Commercial Products, Inc.*, 21 F.3d 1068, 30 USPQ2d 1377 (Fed. Cir. 1993).

**3. Claims 16, 17 and 18 calling for the ribs is not met**

The Examiner does not address the limitations of claims 16, 17 and 18 and how they are found in the combined teachings of Hohmann and Corwin. At the very least the Examiner was obligated to indicate what structure in the Hohmann patent that was considered to meet the rib

or ribs limitation. There are no ribs in the Hohmann brick tie. The ribs being referred to in claims 16, 17 and 18 are the ribs 42 shown in Applicants' Figure 7 embodiment.

Claim 25 depends from claim 24, which in turn depends from claim 20. Claim 25 thus includes the limitations found in claim 24, which sets forth that the slot includes a surrounding edge and wherein a portion of the tie that projects into the slot includes a pair of spaced apart notches that are disposed adjacent an edge extending around the slot. This is illustrated in Figure 8 of Applicants' application. The Hohmann patent does not include a pair of spaced apart notches. The inverted T-shaped portion of the Hohmann tie referred to by numerals 60 and 62 do not form a pair of notches. A notch, construed consistently with Applicants' specification, includes a cutout that includes opposed surfaces that surround the edge of the notch. The Examiner has failed to construe the term "notch." A notch considered in light of its traditional definition and this specification would include a cut formed in a piece of material where the cut defined a V-shaped or U-shaped configuration. Hohmann's L-shaped bracket that extends around the edge does not form a notch.

Again, Applicants have some difficulty in understanding the Examiner's position in this case since none of the dependent claims were addressed. Accordingly, Applicants have no way of knowing how the Examiner has construed claim 25, for example, and how the Examiner has applied the Hohmann reference.

**C. Claims 1-4, 7-10, 15, 19-22 are not obvious in view of Allan (U.S. Patent No. 4,373,314) and Corwin**

As stated before, Applicants rely on the same argument advanced above with respect to the combination of Hohmann and Corwin. That is, the Patent Office has failed to make a prima facie case of obviousness because there is no factual support for the proffered motivation to combine Corwin with Allan or any other of the primary references.

In addition to those arguments advanced above, there is one additional argument as to why there is no motivation to combine in this case. The Allan patent shows a brick tie that is secured directly to a wood stud framing structure F. That is, the brick tie is not connected to a relatively soft wallboard that is interposed between the brick tie and the stud. The Examiner's proffered motivation hinges on the proposition that it would be desirable to press spikes into the attaching structure prior to using screws or nails. That would not be desirable in the case of the Allan disclosure. It would be extremely difficult to press spikes into a wood stud. The difficulties encountered in doing so would far outweigh any advantages, even if there were some advantages to be achieved. Hence, in the case of the Allan and Corwin combination, this is an additional reason why there is no factual support for the proffered motivation.

**D. Claims 24, 25 and 27 are not obvious over Pierson, U.S. Patent No. 4,955,172, in view of Corwin, and in further view of Moreiz et al., U.S. Patent No. 4,206,577**

Claims 24, 25 and 27 include the limitation that the tie is of a generally L-shape. The Examiner acknowledges that neither Pierson or Corwin show this feature. However, the Examiner notes that Moreiz shows an L-shaped tie and states:

An L-shaped tie would have been an obvious choice of tie to use when working with different bricks such as those having the shape taught by Moreiz.

Of course, this motivation presumes that it is desirable to have a tie that is designed to work with the particular shape of blocks shown in the Moreiz patent, particularly Figure 4. However, there is nothing of record that supports this assumption. There is no factual basis for such as modification. The primary reference of Pierson shows a substantially straight tie. See Figures 1-6. If the tie was L-shaped, it would not fit flush between the successive courses of brick. Indeed, it appears that the L-shaped tie relied upon by the Patent Office from the Moreiz patent can only function where the terminal end can be turned down into a cavity. In order to achieve a

solid and sturdy connection it would be important for the tie to fit flush between the successive courses of block. If Pierson used the L-shaped Moreiz tie, then it would be practically impossible to use the same tie with conventional bricks. If the L-shaped terminal end was interposed between flat bricks then that would, of course, increase the spacing between the successive bricks which would require more mortar and would produce thick joints and an unacceptable brick façade appearance. There is no evidence of record of any tie component of a brick tie that is to be disposed between two flat opposing brick surfaces being anything other than generally flat. There is no evidence of an L-shaped brick tie being interposed between two bricks or blocks having opposed flat surfaces. The motivation to combine Moreiz with Pierson and Corwin is inspired by hindsight.

#### **E. Conclusion**

For the foregoing reasons, it is respectfully requested that the Board of Appeals reverse all rejections in this case.

#### **(VIII.) CLAIMS APPENDIX**

1. (Currently Amended) A brick tie for being interconnected between a brick wall and a back-up wall having a series of spaced apart studs and a wall board secured to the studs wherein each stud includes a pair of spaced apart flanges and a web extending between the flanges, the brick tie comprising:

- a. a plate adapted to fit flush against the wall board, the plate including a back side and a front side;
- b. a series of triangular shaped spikes cut from the plate and bent outwardly from the plate such that each triangular shaped spike forms a triangular shaped opening in the plate and projects outwardly from the plate adjacent the triangular



- shaped opening formed by the spike, and wherein the series of spikes project into the wall board and at least partially secure the plate to the wall board;
- c. fastener openings provided in the plate;
  - d. a series of fasteners projecting through the fastener openings and through the wall board and into the flange of one stud for securing the plate to the stud via the flange;
  - e. a tie holder formed on the front side of the plate; and
  - f. a tie secured to the tie holder and freely movable up and down within the tie holder, the tie projecting from the tie holder and adapted to be secured between two courses of brick such that the back-up wall, including the studs thereof, is interconnected to the brick wall via the brick tie.
2. The brick tie of claim 1 wherein a series of said brick ties are interconnected between a brick wall and the back-up wall for forming a wall structure that includes the series of brick ties, the wall board, and the plurality of studs.
3. The brick tie of claim 1 wherein the tie comprises a generally V-shaped pair of arms with each arm including an end portion that is turned inwardly such that the end portions of the arms are spaced apart and generally aligned.
5. The brick tie of claim 3 wherein the plate is provided with four spikes.
7. The brick tie of claim 1 wherein the tie holder includes an elongated slot formed by a member that projects outwardly from the front side of the plate.
8. A method of anchoring a brick wall to a back-up wall having a plurality of studs and a wall board connected to the studs wherein each stud includes a pair of flanges and a web extending between the flanges, the method comprising:
- a. aligning a plate of a brick tie with the flange of a stud and securing the plate to the wallboard about a side of the wallboard opposite the flange;

- b. wherein securing the plate to the wall board includes projecting a series of spikes from a back side of the plate into the wall boards such that the plate is aligned with the flange of the stud;
  - c. wherein the series of spikes are triangularly shaped and cut from the plate and bent outwardly from the plate such that each triangular shaped spike forms a triangular shaped opening in the plate and projects outwardly from the plate adjacent the triangular shaped opening formed in the plate by the spike;
  - d. extending a series of fasteners through a front face of the plate, through the wallboard, and directly into the aligned flange of the stud;
  - e. extending a tie from the face of the plate outwardly therefrom to a position overlying a course of brick; and
  - f. adding an additional course of brick over the tie such that the tie is sandwiched between two courses of brick and such that the brick tie interconnects the brick wall with the back-up wall.
9. The method of claim 8 including cutting the plate in a plurality of areas and bending the cut areas from the plate to form the spikes.
10. The method of claim 9 including forming at least four separate spikes and projecting the spikes from the back side of the plate; and securing at least two fasteners by extending the fasteners through the plate, through the wall board and into the aligned flange.
15. A brick tie for being interconnected between a brick wall and a backup wall, comprising:
- a. a plate adapted to be secured to the backup wall;
  - b. one or more fastener openings provided in the plate;
  - c. at least one fastener adapted to project through the fastener opening for securing the plate to the backup wall;
  - d. a retainer associated with the plate; [[and]]

- e. a tie adapted to be held by the retainer and wherein the tie projects outwardly from the retainer such that the tie can be secured between two courses of brick; and
  - f. a series of triangular shaped spikes cut from the plate and bent outwardly from the plate such that each triangular shaped spike forms a triangular shaped opening in the plate and projects outwardly from the plate adjacent the triangular shaped opening formed in the plate by the spike.
16. The brick tie of claim 15 wherein the tie includes at least one rib.
17. The brick tie of claim 16 wherein the tie includes a plurality of ribs.
18. The brick tie of claim 17 wherein the ribs extend transversely across the tie.
19. The brick tie of claim 15 wherein the tie is particularly configured to extend at least partially around the retainer such that the retainer holds the tie and the tie is permitted to move up and down on the retainer.
20. A brick tie for being interconnected between a brick wall and a backup wall, comprising:
- a. a plate adapted to be secured to the backup wall;
  - b. at least one fastener for securing the plate to the backup wall;
  - c. an elongated slot formed in the plate;
  - d. a tie adapted to be confined in the slot and movable back and forth therein, and wherein when the tie is confined within the elongated slot, the tie extends outwardly from the plate; and
  - e. a series of triangular shaped spikes cut from the plate and bent outwardly from the plate such that each triangular shaped spike forms a triangular shaped opening in the plate and projects outwardly from the plate adjacent the triangular shaped opening formed in the plate by the spike.

21. The brick tie of claim 20 wherein the plate includes a raised surface and wherein the elongated slot is formed in the raised surface.
22. The brick tie of claim 20 wherein the plate includes a back surface and a front surface and wherein at least a portion of the front surface is raised, and wherein the elongated slot is formed in the raised portion.
23. The brick tie of claim 20 wherein the tie includes an inner end portion that is provided with a pair of opposed notches that retain the tie within the elongated slot.
24. The brick tie of claim 20 wherein the portion of the tie projecting from the plate assumes a generally L-shape.
25. The brick tie of claim 24 wherein the slot includes a surrounding edge and wherein a portion of the tie that projects into the slot includes a pair of spaced apart notches that are disposed adjacent an edge extending around the slot.
26. The brick tie of claim 20 wherein a portion of the plate, is raised and wherein the slot is formed in the raised portion of the plate and wherein the slot includes a surrounding edge; and wherein the tie includes an inner end portion that includes a pair of opposed notches and wherein the tie is confined within the slot by inserting the inner end portion of the tie into the slot such that a portion of the surrounding edge of the slot extends into the notches, and wherein the inner end portion of the tie can be moved back and forth within the slot, and wherein the notches are configured such that by rotating the inner end portion of the tie, the tie can be removed from the slot.
27. The brick tie of claim 26 wherein the tie is of a generally L-shape.

**(IX.) EVIDENCE APPENDIX**


None.

**(X.) RELATED PROCEEDINGS APPENDIX**

None.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.

A handwritten signature in black ink, appearing to read "Larry L. Coats", is written over a horizontal line.

Larry L. Coats  
Registration No.: 25,620

Dated: October 28, 2005

P.O. Box 5  
Raleigh, NC 27602  
Telephone: (919) 854-1844  
Facsimile: (919) 854-2084